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WAR FOOD ADMINISTRATION
Extension Service

FACTS ON AMERICAN COTTON PRODUCTION 1/

When the present war is over we shall face the post-war adjustment period with a record carry-over of world cotton on hand. We shall also face vastly changed conditions of demand, competition, and price relationships which will affect market outlets for American (U. S.-grown cotton) as well as other cotton. What should be the policy of the American cotton farmer in regard to these problems? Some of the more important aspects of the present and post-war cotton situation which may be useful in thinking through these problems are discussed briefly in this statement.

1. Supply of American and Foreign Cotton

The total carry-over August 1 of American cotton, both at home and abroad, reached a peak of over 14 million bales in 1939. In the past 5 years this carry-over has been reduced to about 11.5 million bales. The world carry-over of foreign cotton, however, has increased rapidly during this 5-year period, so that the total carry-over of world cotton increased to a peak of 24 million bales on August 1, 1943, and may have reached 25 or 26 million bales by August 1, 1944. This compares with a 1935-39 average of slightly more than 17 million bales. What happens to this stock of cotton up to the close of the war depends very largely upon how long the war lasts and world production and consumption trends.

At present the problem in this country is further complicated by the quality and staple of the carry-over and the way in which the stocks are held. Much of it is shorter staple and of lower grade than an average crop or of current disappearance. Though this is not thought to be a serious problem no material correction of the situation is in immediate prospect. A sizable proportion of the stocks in the United States is owned outright by the Government, and a quantity is held by the CCC as security for nonrecourse loans. There are, of course, prohibitions on the sale of Government-owned cotton below parity prices.

The loan program will continue in 1944 as in the past 2 years, but at a higher level. It should be kept in mind also that legislation now on the books provides for support of cotton prices at 92.5 percent of parity for 2 years after the January 1 following the formal declaration of cessation of hostilities.

2. Trends of Production

During the last 10 years the U. S. cotton crop has averaged 25,645,000 acres and produced 12,293,000 bales, whereas for the decade of the 20's it averaged 38,250,000 acres and produced 13,124,000 bales. Since 1930 we have had only 2 crops above 14 million bales, although in the 20's we had 4 crops above that figure. These figures indicate a downward trend in production in this country. On the other hand, total agricultural production of foreign cotton has averaged 16,778,000 bales during the last 10 years, whereas for the decade of the 20's it averaged 10,634,000 bales. Thus, a definite trend upward in foreign cotton

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production is indicated. As a result of this decrease in production of American cotton and the rapid increase in the production of foreign cotton, the proportion of all growths which is American cotton has decreased at a significant rate since the 1920's. In the decade of the 20's from 50 percent to 63 percent of the total world cotton crop was produced in the United States, whereas for the last 5 years we have produced from 39 to 47 percent of the total. At the time these shifts in production were taking place the consumption of American cotton declined 8 percent while the consumption of foreign cotton and of all cotton increased 58 and 19 percent respectively.

The national control program during pre-war years, and competition of other crops for land and the reduced supply of labor, machinery, and fertilizer during the war period, have undoubtedly had a pronounced influence upon the domestic production of cotton. The national control program, of course, though accepted as necessary to bring cotton supplies into line with consumption, reduced the acreage of cotton in the United States up to our entrance into the war. Since that time the combination of wartime developments described above has reduced the acreage and production still further. The relative profitableness of other enterprises and their competition for the factors of production in the Cotton Belt will determine in large measure the trend of American cotton production in the post-war period.

For many years there has been a definite trend toward diversification on cotton farms in many sections of the Cotton Belt. Although every farmer in these areas did not make adjustments in his crops and livestock, the number of farmers able to figure an economic advantage in such adjustments was large enough to have a perceptible influence upon cotton acreage as well as upon acres of other crops and numbers of livestock in the Cotton Belt. Whether this trend continues in the post-war period depends, in large measure, upon the price received for cotton and cottonseed in relation to that received for other competing products such as livestock, livestock products, and alternative cash crops. The labor situation, size of farms, average yields per acre, and the development of adapted machinery will also have an important influence upon the extent to which this adjustment in enterprises continues.

3. Trends in Consumption of American and Foreign Cotton

Domestic cotton consumption is at present declining, but it is still well above any pre-war year. The index of cotton consumption (1935-39 = 100) advanced from 119 in September 1940 to a peak of 177 in April 1942. After that time the index receded to 151 in April 1944 and then dropped precipitously to 142 in May and 140 in June. This latter figure was the lowest for any month since November 1940 and 21 percent below the peak of April 1942. It seems rather apparent that the public, both at home and abroad, would, at the present time, be glad to take and pay for more cotton goods than they are now able to get. An important question is whether this unsatisfied civilian demand will express itself in larger mill consumption of American cotton when conditions permit. Domestic consumption is now virtually all American cotton. Consumption of our cotton by foreign mills, however, has decreased about 80 percent in comparison with the annual rate for 1930-39.

Total world consumption of all cotton, though about equal to the annual rate maintained from 1925 to 1929, is somewhat below that for 1935-39 despite the large U. S. consumption. Restrictions brought about by the war have, no doubt, been an important influence in shifting consumption between American and foreign cotton. Of course, consumption in the Axis-controlled countries is limited to the

production within these areas, which is far below their normal needs. Furthermore, some of the best customers of American cotton, among Allied and neutral nations, have radically decreased production of cotton goods while other countries such as Brazil, Argentina, India, Egypt, Mexico, Peru, Columbia, and Persia have greatly increased yardage production. Restrictions on ocean transportation during the war also have made shifts necessary. Except for shipping difficulties the price disparity which caused some shifts away from American cotton to that of competing cottons would have resulted in even greater shifts.

With exchange available in the post-war period we can get some export trade; how much, will depend upon world trade policy, the volume of international trade, the relative price of American and foreign cotton, and developments in competing fibers. This naturally raises the questions of trade barriers, export subsidies, two-price systems, international agreements, and the price at which we are willing and able to produce cotton on American farms. The grade and staple of cotton desired by American mills as compared with that produced in this country introduces a problem in greater domestic consumption. Cotton mills would like to have a larger proportion of cotton of the higher grades than American farmers are producing at present. Moreover, the percent of high-grade cotton has been decreasing rapidly for a decade or more. The percentage of American cotton which is Strict Middling or better, for instance, has decreased from 47.6 in 1928 to 7.2 in 1942 with few large variations from the general downward trend. In 1943, however, the percentage increased to 15.5 after an educational campaign with growers and ginnerers.

It is not improbable that further improvements could be made in cotton manufacturing and distribution processes which would make it possible to narrow the margin between the price received for cotton by the farmer and that paid for manufactured goods by the consumer. These improvements might take the form of new and improved processes both in manufacturing and servicing, economies in the use of labor and materials, increased efficiency in manufacturing with improved equipment, and improvements in the distribution channels for the textiles. Any or all of these economies may be expressed in higher prices to the farmer or in lower prices to the consumer, or both. Obviously this field of development, while presenting opportunities for greater use of cotton goods, leads to many complications, and much time may be required to work out the improvements and get them into general use. More immediate results can be expected by producers increasing their own efficiency in the production and handling of cotton, as discussed in section 7.

4. Competition of Synthetic Fibers With Cotton

The total world production of synthetic fiber for 1943 was estimated at about the equal of 8.2 million bales of cotton. The equivalent of about 1.5 million bales was produced in the United States. Axis-dominated countries, spurred on by lack of raw cotton, have developed a strong synthetic fiber industry which produced the equivalent perhaps of more than 4 million bales of cotton last year. Many people in central Europe have used little but synthetic textiles for years. It is hardly to be expected that the growing synthetic industry will discontinue the manufacture of synthetics when cotton becomes freely available again. We can, therefore, expect continued competition between natural and artificial fibers.

While the average person in the United States in the 5 pre-war years consumed approximately 26 pounds of cotton per year, the rest of the world consumed 5.1 pounds. It is not to be expected that cotton consumption of other countries can be raised to that of our own people but it could be materially increased and thus afford an expanded world market. World trade policy, the opportunity for other countries to sell and buy, and the amount of exchange available to these countries to purchase raw material and manufactured products will in large measure determine whether they buy and use cotton or further expand manufacture of synthetic fiber as a substitute.

5. New Uses for Cotton

As an offset or partial offset to the competition of synthetic fibers, we have the development of new uses for cotton and the possibilities for further development along that line. Some of the most promising new developments use cottons of low grade which are those hardest to sell at the present time. The new fireproof insulating material is an illustration of this type of use. In its manufacture cotton of low quality can be used. As an insulation the product equals or excels any other material now commercially available. On the other hand, however, only low prices can be paid for the cotton under present conditions of manufacture. Moreover, wide fluctuations in price upset the manufacturers' plans and calculations to the point that they are unwilling to make the necessary expenditures to equip a plant for manufacturing the product except on a subsidized basis. Incidentally, the Department of Agriculture has subsidized the program each year since 1939-40.

The goal for production of cotton insulation in 1944 is 60 million pounds. This has increased under Government subsidy from 55,000 pounds in 1940. In addition there are a number of new uses for cotton which may be developed to the point where considerable volume will be used, particularly in the field of plastics. There are also developments which give promise of greater use of specially treated cotton textiles in winter outer garments.

6. Prices: American vs. Foreign Cotton

The price at which American cotton sells has an important influence upon how much is used in this country and in foreign countries, and upon the extent to which foreign cotton takes its place and synthetic fibers are substituted for cotton in this country. Also the price at which American cotton sells determines in a large measure the welfare of southern farmers who produce it. This, therefore, presents two horns of a dilemma for the American statesman and the southern farm leader. Higher prices for the farmer inevitably lead to greater competition from foreign cotton and from synthetics. Twice since 1933 we have subsidized the sale of cotton in foreign markets in order to meet the price of foreign-grown cotton. Some have looked to Government payments and export subsidies as a means of meeting foreign cotton competition, but export subsidies will not help with competition from synthetic fibers produced in this country. There is, on the other hand, the possibility of developing an international agreement among the exporting countries which will limit each to a definite quota of the total export trade. Such an agreement would have the effect of reducing competition between countries and enable growers to know better what to expect in the way of foreign markets.

The difficulty encountered when American cotton is priced materially higher than similar foreign cotton is well illustrated by our experience on the Canadian market during the past few years. During the 16 years, 1923 through 1938, Middling 15/16 cotton at New Orleans averaged 14.98 cents a pound. During the same period, Brazilian type 5 at Sao Paulo averaged 15.51 cents a pound or 53 points higher. Beginning in 1940 the price of this type of Brazilian cotton dropped in comparison to American and by the end of 1941 it was more than 6 cents a pound below Middling 15/16. In the first 27 months following Pearl Harbor, the price of American cotton ranged from 6.47 cents to 11.74 cents above Brazilian cotton.

Consumption of American cotton in Canadian mills decreased from 203,000 bales during the last 6 months of the 1939-40 season to 126,000 bales and 81,000 bales during the first and last 6-month periods of the 1940-41 season, or from 97 percent of the total to 57 percent and 32 percent. At the same time the use of Brazilian cotton in Canada increased from less than 900 bales in the last half of 1939-40 to 87,000 bales and 162,000 bales in the successive 6-month periods of 1940-41, or from less than 1/2 of 1 percent to 39 percent and 65 percent respectively. This shift took place even though Canada had used no Brazilian cotton prior to the 1938-39 season. Since the shipping situation has been so tight Canadian mills have been obliged to shift back to American cotton, but when ships are again available exporters of foreign cotton will make every effort to sell it.

Factors which contributed to the unusual disparity between the prices of American and Brazilian cotton mentioned above, included the increase in general price level and the increase in loan rate in this country, the tight shipping situation, and other wartime difficulties. While this situation will undoubtedly change when the war is over, the fact remains that foreign producers have been willing for many years to produce cotton at prices substantially below parity in this country. Judging by the above and other similar experiences, we must conclude that unless we meet their price for a given spinning quality we will likely sell little cotton on the world market. This merely underscores the necessity of adjusting quantity and quality of production, prices, or cost of production, or all three, to the point where we can sell our exportable surplus and let the producer enjoy a reasonable level of living.

7. Lowering Production, Merchandising, and Processing Costs

Can southern farmers make sufficient income to maintain their families at a reasonable level of living by growing cotton and selling it in open competition on the world market? All farmers in the South have not as yet taken full advantage of all opportunities for reducing the cost of producing cotton. By using the better known practices, some farmers produce cotton from year to year for about half the cost a pound of other farmers in the same community.

Opportunities for reducing production costs lie primarily in two directions, improved production practices which result in better yields and lower costs a pound, and improved farm organization practices which permit fuller use of the productive resources on the farm. Improved production practices such as the selection of better land, selection of seed, treatment of seed, more and better fertilizer, full use of improved equipment, insect control, more efficient cultural practices, and more efficient harvesting and ginning practices, all add their contribution rather direct to lower costs of production. Improved farm organization practices such as the production of winter cover crops, legumes, and feed for livestock, and the inclusion of livestock and other cash crops as commercial enterprises with the use of

sod crops, result in indirect as well as direct contributions to the lower production costs.

There are also promising opportunities for reducing marketing and processing costs through better ginning and merchandising practices, and selling on the basis of quality. Any economies effected along this line will help us retain both domestic and foreign markets in the face of keen competition. Some of the competing countries have purchased machinery from the United States which has enabled their industry to perform these services more effectively and perhaps at less cost.

There is the further possibility of reducing costs by obtaining adjustments in the price of cost items, such as equipment and supplies, which go into the cost of producing cotton, that should not be overlooked. These adjustments, however, are largely beyond the control of the farmer and the main dependence for reducing costs of producing cotton in the past has been in the two fields discussed above.

8. National and International Policies Affecting Cotton

These are among the important factors that must be taken into account in considering the future of the American cotton industry. However, there are many other influences which will have a marked bearing upon the well-being of the cotton farmer in the future and should be considered. What will be our national and international policies in regard to trade with other countries? What will be our national and international policies in regard to cotton, particularly? Should the American cotton producers make an aggressive effort to compete with foreign production on an open competitive market? Should they plan to depend upon some governmental protection such as subsidies, or a two-price system? Should the important cotton-producing countries of the world work out a cotton-marketing agreement which will allot a proportionate share of the world market to each of the exporting countries? Can some better alternative measures be developed?

Should American producers follow the earlier thesis of maximum cotton production, or should they pursue a more intensive program for the use of land according to its best adaptation in the light of existing demands for cotton and other farm products? If production of American cotton must be further reduced to bring supplies in line with market outlets, what must be added to the agriculture of the South to insure the efficient utilization of available labor facilities and physical assets? What would be the ultimate effect upon the agricultural economy of the South under each of these procedures? These are some of the questions and problems that demand careful consideration, and on which some agreement must be reached by farm leaders, if the American cotton industry is to avoid becoming a permanent national problem.

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